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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,407	09/05/2006	Neil McNeill Alford	330035	2526

7590
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02/23/2007

EXAMINER

BAISA, JOSELITO SASIS

ART UNIT	PAPER NUMBER
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2832

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/572,407

Applicant(s)

ALFORD ET AL.

Examiner

Joselito Baisa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 24-46 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 24-46 is/are rejected.
- 7) ☒ Claim(s) 44-46 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 3/16/2006.
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION***Claim Objections***

Claims 44-46 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The subject matters in claims 44-46 are broader than that of their parent claims because the recitations of these claims call for a device comprising an electronic circuit recited in their parent claims. They do not recite further any additional functional or structural characteristics of the device itself. Therefore, these depending claims fail to further limit the scope of the parent claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 24-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Gardner [6870456].

Regarding claims 24 and 30, Gardner discloses a primary circuit and a secondary circuit having a number of turns such that transformer 1400 comprises a plurality of layers, each layer having alternating primary and secondary conductors (1410, 1460) adjacent one another, there being a

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combination of number of turns and a number layers sufficient to obtain a transformer action for passing waveform from primary circuit to secondary circuit [Col. 17, Lines 7-54, Figure 14].

Regarding claim 25, Gardner discloses layer extends radially outwardly from a centre of transformer [see Figure 14].

Regarding claim 26, Gardner discloses layer forms an annulus around an axis of transformer [see Figure 14].

Regarding claim 27, Gardner discloses separation between said primary and secondary conductors is between about 0.02mm and 0.075mm [Col. 2, Lines 54-58, Figure 14].

Regarding claim 28, Gardner discloses the separation between each layers is between about 0.02mm and 0.2mm [Col. 8, Lines 59-62].

Regarding claim 29, Gardner discloses at least ten layers [Col. 17, Lines 46-54].

Regarding claim 31, Gardner discloses a DSL modem comprising the comprising an electrical circuit of the coreless transformer [Col. 1, Lines 24-26].

Regarding claims 32 and 33, Gardner discloses a line interface transformer having a primary circuit and a secondary circuit, each circuit being formed of a continuous electrically conductive material and in which the primary circuit and the secondary circuit are substantially parallel and are in substantially the same plane [Col. 17, Lines 46-54, Figure 14].

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With regards to the claim, “a primary circuit for coupling to a transmission line and a secondary circuit for outputting a signal transmitted over said transmission line”, the claim is inherent characteristic of a transformer. It is inherent for the claimed structures to carry out the method steps as coupling to a transmission line and outputting a signal transmitted over said transmission line as disclosed by Gardner.

Regarding claim 34, Gardner discloses the spiral is substantially circular, elliptical, square, rectangular, oval or non-regular [Col. 2, Lines 51-52].

Regarding claim 35, Gardner discloses the spiral conforms substantially to a spiral formed by the polar equation $r(\theta) = \alpha\theta$, where θ is the angle in polar coordinates, r is the radius and α is a constant that regulates the number of turns and the spacing [Col. 2, Lines 48-63, Figure 14].

Regarding claim 36, Gardner discloses a number of turns of each circuit is at least 10 [Col. 2, Lines 58-62].

Regarding claim 37, Gardner discloses a plurality of planes, each plane forming a layer and in which a primary circuit of each layer is connected together and secondary circuit of each layer is connected together [Col. 17, Lines 45-54, Figure 14].

Regarding claim 38, Gardner discloses layers are substantially parallel [Col. 17, Lines 45-54].

Regarding claim 39, Gardner discloses the separation between said layers is not more than 0.5mm [Col. 8, Lines 59-62].

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Regarding claim 40, Gardner discloses the primary circuits are connected in parallel or in series with one another, and the secondary circuits are connected in parallel or series with one another [Col. 17, Lines 45-54, Figure].

Regarding claim 41, Gardner discloses at least 10 layers [Col. 17, Lines 46-54].

Regarding claim 42, Gardner discloses having an aspect ratio defined as diameter to width of 1:5 or more [Col. 2, Lines 54-58].

Regarding claim 43, Gardner discloses the line interface transformer does not comprise ferromagnetic core [Col. 2, Lines 48-62].

With respect to claim 44-46, since the recitation of the claims are considered intended use because they call for a DSL modem in which claim 24 is utilized.

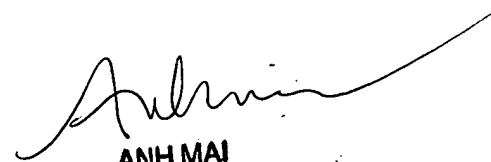
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joselito Baisa
Examiner
Art Unit 2832



ANH MAI
PRIMARY EXAMINER

jsb